



UNITED STATES DEPARTMENT OF COMMERCE

Patent and Trademark Office

COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
08/784.224	01/16/97	SULTIVAN	Α	128-96-003

LM11/0325

L JOY GRIEBENOW ELECTRONIC DATA SYSTEMS CORPORATION 5400 LEGACY DRIVE H3-3A-05 PLANO TX 75024 EXAMINER

MYHRE, J

ART UNIT PAPER NUMBER

2767

DATE MAILED: 03/25/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Re: Klumiers auxever

Commissioner of Patents and Trademarks



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER OF
PATENTS AND TRADEMARKS
Washington, D.C. 20231

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 11

Application Number: 08/784,224 Filing Date: January 16, 1997

Appellant(s): Sullivan

MAR 25 1998

Barton E. Showalter
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed February 16, 1999.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

Art Unit: 2767

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is deficient because it does not provide a concise explanation of the invention.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 1-28 stand or fall together because appellant's brief includes a statement that this grouping of claims does not stand or fall together but does not provide reasons in support thereof. See 37 CFR 1.192(c)(7).

Art Unit: 2767

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,675,745	OKU ET AL	10-1997
5,548,506	SRINIVASAN	8-1996
5,499,340	BARRITZ	3-1996
5,410,344	GRAVES ET AL	4-1995

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. Claims 1-7, 11-14, and 19-22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Oku.

Claims 1, 11, and 19 (Amended): Oku discloses a computer-based knowledge management system, apparatus, and method comprised of:

a. A client which generates a first request (query) for a knowledge worker (user)(col 21, lines 5-26);

Art Unit: 2767

b. A server which receives the first request and generates a second request to the information source (database) when information pertaining to the location of the knowledge item is found in the knowledge matrix (DBMS index)(col 21, lines 5-26); and

c. An information source (database) which responds to the second request by communicating the information requested by the first request to the server (col 21, lines 5-26).

Although Oku does not explicitly disclose the index (knowledge matrix) as part of the DBMS, Oku infers using indexes by reference to searching the databases. Official notice is taken that it is old and well known within the database art to use one or more indexes in database management systems to efficiently query and search databases. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to search the knowledge matrix (database index) in order to ascertain if the information sought was located in the database. One would have been motivated to use an index in view of Oku's discussion of searching the databases and in order to increase the efficiency of the search.

Claim 2: Oku discloses a system as in Claim 1 above and further discloses searching for a variety of types of data in several databases, to include a process database (Figure 42)(col 9, lines 20-24).

Claims 3 and 12: Oku discloses a system and apparatus as in Claims 1 and 11 above which uses the knowledge matrix to locate data items pertaining to the need (requested information) of the knowledge worker (col 21, lines 5-26).

Art Unit: 2767

Claims 4, 13, and 20: Oku discloses a system, apparatus, and method as in Claims 1, 11 and 19 above which uses knowledge matrices as part of its DBMS. As discussed in Claim 2 above, Oku also discloses using process and data databases. As discussed above, it is obvious that each database would have its own index. It is also old and well known within the art that queries for multiple items/needs may be submitted concurrently. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to identify one or more need associated with the knowledge worker and then to identify the process and data item associated with the need. One would have been motivated to do this in view of the discussions above and in order to narrow the scope of the search to data items that meet a multiplicity of needs.

Claims 5, 14, and 21: Oku discloses a system and apparatus as in Claims 4 and 13 above. It is obvious if more than one need was being sought to keep the status on each of the searches until the entire query was answered. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to set up a matrix (grid) to store status information on each item. One would have been motivated to use such a structure in order to facilitate tracking the query through to completion.

Claims 6 and 22: Oku discloses a system and method as in Claims 5 and 21 above. A process, by definition, is fluid and consists of one or more steps used to complete an action. On the other hand, an instance of a data item is static and unchanging. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made that it would be

Art Unit: 2767

necessary to store an indicator of the executed step of a process (execution flag), but only necessary to store the identity of the data item instance. One would have been motivated to store different types of information based on the type of item in view of the differing dynamics of the information involved.

Claim 7: As discussed in Claims 1 and 2 above, <u>Oku</u> discloses the server submitting queries to several databases. It is well known within the computer art that the databases in a network such as <u>Oku</u>'s could be located at any one or more of the network nodes and still receive queries. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made that the information source could be internal or external to the server. One would have been motivated to use one or more databases which were external to the server in view of <u>Oku</u>'s querying multiple databases and in order to allow for multiple queries to be conducted concurrently without overburdening the main server.

2. Claims 8, 18, and 23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Oku in view of Srinivasan.

Claims 8, 18, and 23: Oku discloses the system, apparatus, and method as in Claims 1, 11, and 19 above, and further discloses using a plurality of clients within an organization. However, Oku does not disclose using different levels of access authorization to establish personal profiles of clients. Srinivasan discloses using passwords to differentiate between different clients/types of clients (col 3, lines 33-38). Therefore, it would have been obvious to one having ordinary skill in

Art Unit: 2767

the art at the time the invention was made to use personal and default profiles (access profiles/access authorizations) for each client or type of client. One would have been motivated to use such a method in view of Oku's description of "client environments" and the need to identify individual clients (knowledge workers) and their needs.

3. Claims 9, 15, 17, 24, and 26-28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Oku in view of Srinivasan as applied to claims 1, 11, and 19 above, and further in view of Barritz.

Claims 9, 15, and 24: Oku discloses the system, apparatus, and method as in Claims 1, 11, and 19 above. Oku further discloses using a plurality of clients within an organization activity management system, and Srinivasan discloses identifying each client with a password to compile personal profiles as in Claims 8 and 18 above; but neither discloses capturing data by tracking each client's system usage. Barritz discloses monitoring and tracking the frequency of user access to computer programs and software products (col 1, lines 8-10). Barritz further discloses several methods that could be used as a watch module for capturing data to determine the proportional usage by any one of numerous programs/products available. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to compile access statistics on the clients usage. One would have been motivated to capture client access statistics in view of Oku's description of "client environments" and Srinivasan's description of

Art Unit: 2767

personal profiles in order to track and report such commonly reported system statistics as access levels of system components, software, resources, etc.

Claim 17: Oku further discloses a system with a "pending matters" section for viewing upcoming deadlines, due dates, etc. Srinivasan further discloses an "Auto Multi-Project Server" which "follows-up with task leaders on pending tasks...." (col 3, lines 6-7). The monitoring and tracking feature disclosed by Barritz above could also be used to track pending requests by placing them in a database referenced by their key identifying element (col 13, lines 57-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to track pending requests using a database as a queue. One would have been motivated to use such a method in view of Barritz' description of monitoring and tracking data in a system and in view of the need to provide delayed answers to client inquiries when the information is not immediately available.

Claims 26, 27, and 28: Oku discloses the system apparatus, and method as in Claims 1, 11, and 19 above. The obviousness of Claim 17 in view of Srinivasan and Barritz is discussed above. Further, when the system is tracking pending tasks it is common practice to notify the user when the task is due to be completed or has been completed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to transmit the pending information to the user once it becomes available. One would have been motivated to automatically transmit the information upon availability in order to prevent the user from having to constantly check on each pending request.

Art Unit: 2767

6. Claims 10, 16, and 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Oku in view of Chang and in further view of Srinivasan and Graves.

Claims 10, 16, and 25: As described in Claim 9 above, Oku, Srinivasan, and Barritz disclose using a watch module to capture client usage statistics, but do not disclose modifying the personal profiles based on said usage statistics. Graves discloses establishing "personal preference [pro]files" for each user and a method for modifying said profiles by adjusting weight factors in response to the user's actions (col 4, lines 44-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to track user access in order to compile statistics on the user's preferences and to adjust said preferences based on subsequent statistics. One would have been motivated to use such a method in view of Oku's description of "client environments", Barritz's description of capturing client usage statistics, and the need to keep the clients' personal profiles updated.

(11) Response to Argument

A. The Obviousness Standard

The Examiner agrees with the Applicant's recital of the 35 U.S.C. 103 guidelines for obviousness rejections.

Art Unit: 2767

B. The Examiner Cites No Prior Art That Alone or In Combination Suggests a Knowledge Matrix that Stores Status Information on a Plurality of Knowledge Items.

The Examiner stated in the Final Action that Oku's database was being searched and concluded that such an action inferred that there was one or more indexes for the database. It is well known within the database art to use indices showing the type, status, and/or content of the items within the database in order to preclude the necessity of doing a full-text search of every item. Normal practitioners in the art would use one or more layers of indices according to the depth and breadth of information being searched. The Applicant asserts that the claimed "knowledge matrix" is not merely a database index, but is "operable to store status information on a plurality of knowledge items" (page 7) which "indicates the availability of the knowledge item" (page 8). The Examiner contends that this is exactly what an index does, whether in a computer database, a card file, or in reference materials such as an encyclopedia. The index shows the user not only what information is available, but also where it is located within the indexed resource.

The Applicant further asserts that "not only does <u>Oku</u> describe a method for modeling databases for use in its organization activity management system, but it teaches away from using other types of data structures in the system." (page 9). Examiner notes that while <u>Oku</u> teaches how to construct the Object-Oriented database, it also includes other types of databases such as a relational database shown in Figure 43 and discussed in column 21, lines 27-34.

Art Unit: 2767

Therefore, it does not teach away from using other types of data structures, but is merely recommending the method used to construct one type of database used in the system.

C. The Examiner Cites No Prior Art That Alone or In Combination Suggests Needs
Associated With a Knowledge Worker, a Process Item or Data Item Associated With a
Selected Need, Status Information On a Step of the Process Item, or Status Information
On an Instance of the Data Item.

The Applicant asserts that Oku does not disclose "any association or arrangement of knowledge workers, needs, process items, and data items." Examiner notes that Oku not only teaches, but actually stresses, the importance of the association between these items. Columns 20 and 21 discuss how the user is able to locate information pertaining to a need by selecting the desired function to locate and display the information by document, by work progress, work group, etc. Furthermore, Oku shows in Figure 42 that this information resides in various databases, such as an Event Database, a Document Database, a Process Database, and a Relational Database. By being able to display the information pertaining to the user's need which includes data from these database, Oku infers that the needs, process items, data items, etc, are associated (cross-referenced) with each other. Additionally, Oku's "work progress" contains the present state of a task, which the Examiner views as the "status information on a step of a process item" claimed by the Applicant.

Art Unit: 2767

D. The Examiner Cites No Prior Art That Alone or In Combination Suggests a Personal Profile for a Knowledge Worker and a Selected Knowledge Worker View, and a Default Profile Associated With a Corresponding Knowledge Worker View.

The Applicant asserts that the <u>Oku-Srinivasan</u> combination does not "teach, suggest, or disclose the use of a 'personal profile'" or a "default profile" (page 11). The Examiner notes that <u>Srinivasan</u> discloses various levels of users. i.e. "program managers, project leaders, task leaders, etc." (col 6, lines 66-67), and further discloses that the availability of system functions depend on the level of the user, such as allowing project leaders to create new projects (col 7, lines 21-25). A separate file with user names and passwords is used to authorize the project leaders to create new projects. This demonstrates that the <u>Srinivasan</u> system not only identifies each user by type (personal profile), but it also infers that each type of user would have a predetermined set of authorizations (default profile). In addition, <u>Oku</u> discusses "client environments" as terminals 4 and 5 which are used by a programmer and an end user respectively (col 21, lines 29-40), thus also stratifying the system by the type of user.

The Examiner bases his inference on the disclosure by both references of various "types" of users and the common practice within society of giving certain "roles and privileges" to individuals based on the "type" or level of position they hold. Within the computer art this takes the form of giving different levels of access to the system based on the user, such as allowing the system manager complete access, finance personnel access to the financial records, section leaders access to the personnel records of only their subordinates,

Art Unit: 2767

etc. (default profiles). This division is normally modifiable to encompass the special needs of individual users (personal profile), such as when they are assigned to a special project for a short period of time.

E. The Examiner Cites No Prior Art That Alone or In Combination Suggests Generating Access Statistics.

The Applicant asserts that because <u>Barritz</u> only tracks and provides statistics on accesses to executable files (col 1, lines 8-10) that it would not have been obvious to track access to other files, such as database files. The Examiner disagrees and believes that it would been very obvious to one skilled in computer arts that one or more of the methods for capturing access statistics disclosed by <u>Barritz</u> could also have been used to capture statistics on accessing other types of files. Furthermore, it is well known within the computer art to track usage statistics for the purpose of billing, resource allocation, maintenance scheduling, etc. In addition, the tracking of accesses to database items is done by tracking the invocations of database searches resulting in the retrieval of that item, and thus is tracking the "executable" search program within the database management system.

Art Unit: 2767

F. The Examiner Cites No Prior Art That Alone or In Combination Suggests a Pending Module that Identifies an Unavailable Knowledge Item and a Pending Queue that Stores Information on the Unavailable Knowledge Item.

The Applicant asserts that the term "pending matters" in Oku is inconsistent with other concepts of Oku (page 12). Examiner notes that Oku uses the term "pending matters" twice in column 23, lines 31-37 in reference to Figure 60 which shows a "depending" button and Figure 61 which shows a "depending matters" heading. Oku does not use the term "depending" nor "depending matters" anywhere in the specification. Furthermore, Oku discusses Figure 54 as showing a work progress table (col 22, lines 48-56), which displays the progress state of the work; and Figure 51 as showing a network diagram of the "work progress" (col 22, lines 30-36). These figures show both completed and uncompleted (pending) tasks pertaining to the work. Srinivasan also discloses an "Auto Multi-Project Server" which contains a "Remind module" (col 6, lines 12-13) "to send out auto reminders to task leaders of pending tasks."; and an "Inform module" (col 6, lines 14-15) "to inform task leaders on completion of dependent activities."

As discussed in Section E above, <u>Barritz</u> discloses tracking systems which monitor access queries. The Examiner contends that it would have been obvious to one skilled in the art to use this tracking system to also monitor queries which were not completed in addition to the tasks which were not completed, and then to send out an automatic reminder or message to the requesting user of the status or completion of the query/task as disclosed by <u>Srinivasan</u>.

Art Unit: 2767

G. The Examiner Cites No Prior Art That Alone or In Combination Suggests Modifying a Personal Profile in Response to Access Statistics.

The Applicant asserts that "Graves is limited to modifying a preference file that is generated by soliciting information from a user by a variety of techniques" and "Therefore, Graves requires interaction 'with the viewer to solicit his/her preferences'". The Examiner notes that Graves is used to show that modifying a personal profile in response to an action by the user was known within the art at the time the invention was made. The Examiner contends that the method by which the new data is obtained, whether solicited from the user or obtained through access tracking, is immaterial in the process of modifying the preference profile. As discussed in Section E above, the system is already tracking user access statistics. It would have been obvious to one skilled in the art to use these statistics in place of soliciting similar data from the user when modifying the preference profile.

Art Unit: 2767

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

ALLEN R. MACDONALD SUPERVISORY PATENT EXAMINED

JWM March 22, 1999

Barton E. Showalter Electronic Data Systems Corporation 5400 Legacy Drive M/S H3-3A-05 Plano, Texas 75024